

Our Ref: ID 2668 Your Ref:

14 October 2024

David Kiernan Goulburn Mulwaree Council 184 Bourke Street Goulburn NSW 2580

Via Planning Portal

email: <u>david.kiernan@goulburn.nsw.gov.au</u> CC: <u>dylan.whitelaw1@ses.nsw.gov.au</u>

Dear David,

Planning Proposal for 274 Mountain Ash Road, Gundary, Goulburn

Thank you for the opportunity to provide comment on the Planning Proposal for Mountain Ash Road, Gundary, Goulburn. It is understood that a gateway determination to amend the Goulburn Mulwaree Local Environmental Plan 2009 to rezone 274 Mountain Ash Road, Goulburn from currently zoned Rural RU1 Primary Production to R5 Large Lot Residential Zone and C2 Environmental Conservation Zone has been issued, with conditions. The concept subdivision plan illustrates an ultimate subdivision of approximately 108 individual lots.¹

The NSW State Emergency Service (NSW SES) is the agency responsible for dealing with floods, storms and tsunami in NSW. This role includes, planning for, responding to and coordinating the initial recovery from floods. As such, the NSW SES has an interest in the public safety aspects of the development of flood prone land, particularly the potential for changes to land use to either exacerbate existing flood risk or create new flood risk for communities in NSW.

The consent authority will need to ensure that the planning proposal is considered against the relevant Section 9.1 Ministerial Directions, including 4.1 – Flooding and is consistent with the NSW Flood Prone Land Policy as set out in the <u>Flood Risk Management Manual</u> 2023 (the Manual) and supporting guidelines, including the <u>Support for Emergency Management Planning</u>. Key considerations relating to emergency management are outlined in Attachment A.

In summary, we:

• **Recommend careful consideration** of the risks associated with placing more people within the floodplain at this location and **recommend** ensuring the access/egress constraints are addressed at the rezoning stage.

¹ Goulburn Mulwaree Council. 2024. Planning Proposal to rezone and amend Minimum Lot Size on Lots at 274 Mountain Ash Road, Goulburn, page 6



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- **Do not support** shelter-in-place strategies for *future development*, particularly as the site can be isolated for up to 30 hours. Such an approach is only considered suitable for existing dwellings where the risk of staying is lower than the risk of evacuating, and should not be used to justify new development.
- **Recommend** ensuring the exclusion of the high flood risk areas from developable land, not just the building footprint, to minimise the risk to life. Additionally, Stage 2 and Stage 3 sites have access/egress constraints which should be resolved.
- Note the proposed alternative evacuation route² via the site internal roads provide safe access/egress in events up to the 1% AEP. We would also like to note that current nominated evacuation centres may not be the locations utilised during a particular flooding event. The location of evacuation centre is determined by a risk-based assessment at the time of the event, and the availability of which should not be used as a basis for future development.
- **Recommend considering advice** from the NSW Department of Climate Change, the Environment, Energy and Water (DCCEEW) in relation to the impacts of the proposed development on flood behaviour at the site and on adjacent and downstream areas.
- Note Section 3.4.3 Flood Education Material of the FIRA is proposing community education for future users of this proposal to reduce flood risk, relying on the NSW SES and the Council resources to manage this³.

You may also find the following Guidelines, originally developed for the Hawkesbury Nepean Valley and available on the NSW SES website useful:

- <u>Reducing Vulnerability of Buildings to Flood Damage</u>
- Designing Safer Subdivisions
- Managing Flood Risk Through Planning Opportunities

Please feel free to contact Ana Chitu via email at rra@ses.nsw.gov.au should you wish to discuss any of the matters raised in this correspondence. The NSW SES would also be interested in receiving future correspondence regarding the outcome of this referral via this email address.

Yours sincerely,

Elspeth O'Shannessy Manager Emergency Risk Assessment NSW State Emergency Service

 $^{^2}$ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment. Figure 3.2, page 25

³ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment, page 33



ATTACHMENT A: Principles Outlined in the Support for Emergency Management Planning Guideline⁴

Principle 1 Any proposed Emergency Management strategy should be compatible with any existing community Emergency Management strategy.

Any proposed Emergency Management strategy for an area should be compatible with the evacuation strategies identified in the relevant local or state flood plan or by the NSW SES.

According to the NSW State Flood Plan⁵ and the Goulburn Mulwaree Flood Emergency Sub Plan⁶ evacuation is the primary emergency management strategy for people impacted by flooding.

The 'shelter in place' strategy is not an endorsed flood management strategy by the NSW SES for *future development*. Such an approach is only considered suitable for existing dwellings where the risk of staying is lower than the risk of evacuating, without increasing the number of people subject to such risk/s.

Principle 2 Decisions should be informed by understanding the full range of risks to the community.

Decisions relating to future development should be risk-based and ensure Emergency Management risks to the community of the full range of floods are effectively understood and managed, including climate change considerations.

The proposal is located east of Gundary Creek and is impacted and isolated by both local creek and overland flooding, ⁷ with 21 farm dams located throughout the site.⁸ The site becomes impacted by flooding as frequently as 20% AEP events, with several natural drainage channels flowing through the Mountain Ash Precinct development boundary.^{9 10} In a PMF event high hazard flooding, up to H5 - H6 flood hazard level,¹¹ impacts multiple lots across all three sites (Stage, 1, 2 & 3). The Stage 3 site, west of Mountain Ash Road, is the most significantly affected by inundation. While we support that the land subject to significant flooding is proposed to be rezoned for C2 Environmental Conservation across the sites, we recommend ensuring the exclusion of the high flood risk areas from developable land, not just the building footprint, to minimise the risk to life.

⁴ NSW Government. 2023. Principles Outlined in the Support for Emergency Management Planning Guideline

⁵ NSW Government. 2021. NSW State Flood Plan. Section 1.6 – Key Principles. 1.6.2, page 5

⁶ NSW SES. 2021. Goulburn Mulwaree Flood Emergency Sub Plan. Section 1.6 – Key Principles. 1.6.2, page 6

⁷ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment, page 21

⁸ Goulburn Mulwaree Council. 2024. Planning Proposal to rezone and amend Minimum Lot Size on Lots at 274 Mountain Ash Road, Goulburn, page 6

 ⁹ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment, page 22
¹⁰ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment. Appendix C, Figure 8

¹¹ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment. Appendix C, Figure 35



The Stage 1 site is the only site that appears to have access north via the proposed internal access road - which, according to the FIRA modelling is impacted by H1 flooding in a PMF, however, any potential flooding impacts (from Boxers Creek) on the proposed evacuation route east via Boxers Creek Road should be considered.

The Stage 2 and 3 sites (which encompass a total of 69 lots combined) are currently isolated as frequently as 5% AEP events, as Mountain Ash Road and Barretts Lane become cut by H2 - H4 hazard level floodwaters at multiple locations.¹² However, we understand that flood immunity up to 1% AEP¹³ event is proposed for the internal roads and the alternate access via Barretts Lane, noting these roads will still be impacted by the more severe events, with little to no warning time. Isolation in these larger events can last up to 30 hours.¹⁴

We note that the FIRA shows '> 1 m' as the upper limit on the Flood Depth legend, flooding at Crossing01 (which is the only proposed access route for the 50 lots at Stage 3 site)¹⁵ has a 3.4m depth in a PMF event¹⁶, and H5 flood hazard level¹⁷, therefore the *above* 1m is not an accurate representation of the potentially significant flood depths at the site.

We recommend considering advice from the NSW Department of Climate Change, the Environment, Energy and Water (DCCEEW) in relation to the impacts of the proposed development on flood behaviour at the site and on adjacent and downstream areas.

Principle 3 Development of the floodplain does not impact on the ability of the existing community to safely and effectively respond to a flood.

Risk assessment should have regard to flood warning and evacuation demand on existing and future access/egress routes. Consideration should also be given to the impacts of localised flooding on evacuation routes. **Evacuation must not require people to drive or walk through flood water.**

Development strategies relying on an assumption that mass rescue may be possible where evacuation either fails or is not implemented are not acceptable to the NSW SES.

We would also like to emphasise that current nominated evacuation centres may not be the locations utilised during a particular flooding event. The location of evacuation centre is determined by a risk-based assessment at the time of the event.

¹² Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment. Appendix C, Figure 31

¹³ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment, Figure 3.1, page 23

 ¹⁴ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment, page 32
¹⁵ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment. Figure 3.7, page 30

 ¹⁶ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment, page 32
¹⁷ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment. Appendix C, Figure 35



Principle 4 Decisions on development within the floodplain does not increase risk to life from flooding.

Managing flood risks associated with flooding requires careful consideration of development type, likely users, and their ability respond to minimise their risks. This includes consideration of:

- Isolation There is no known safe period of isolation in a flood, the longer the period of isolation the greater the risk to occupants who are isolated.
- Secondary risks This includes fire and medical emergencies that can impact on the safety of people isolated by floodwater. The potential risk to occupants needs to be considered and managed in decision-making.
- Consideration of human behaviour The behaviour of individuals such as choosing not to remain isolated from their family or social network in a building on a floor above the PMF for an extended flood duration or attempting to return to a building during a flood, needs to be considered.

Principle 5 Risks faced by the itinerant population need to be managed.

Principle 6 Recognise the need for effective flood warning and associated limitations.

As the site is subject to flash flooding, there is little to no warning time for the community to respond to a flood threat in an appropriate and timely manner, for example if they were going to prepare to isolate or evacuate if they were vulnerable to being isolated.

Principle 7 Ongoing community awareness of flooding is critical to assist effective emergency response.

Development in a floodplain will increase the need for NSW SES to undertake continuous community awareness, preparedness, and response operations. Increased demand on emergency services, such as ongoing community awareness and education, as well as providing rescue and resupply assistance in a flood event, is likely to result in increased government spending for emergency management from this development.

Section 3.4.3 Flood Education Material of the FIRA is proposing community education for future residents of this proposal to reduce flood risk¹⁸. While we encourage ensuring communities are aware of their flood risk and NSW SES and Council undertake community education and awareness to manage flood risk, this should not be used to justify increasing the number of people at risk in the floodplain.

¹⁸ Engeny. 2024. Windellama Road & GTSMF Goulburn Flood Impact and Risk Assessment, page 33